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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,570	10/30/2003	Kouji Asako	Q78211	5920
23373	7590	06/27/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			MORRISON, THOMAS A	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/696,570	Applicant(s) ASAKO, KOUJI	
	Examiner Thomas A. Morrison	Art Unit 3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/30/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, this claim first recites "a plurality of slots" in line 2, and then recites "the slot" in line 16. It is unclear which slot is referred to in line 16.

Regarding claim 2, it is unclear where the recited widths are located. Are the widths between the guide ribs? Is each width measured between one of the guide ribs and one of the side walls?

Regarding claim 5, it is unclear if applicant is trying to claim the paper discharge unit or the combination of the discharge unit and the papers.

Regarding claim 7, it is unclear what is meant by the recited "chute box having a plurality of slots **for inserting** papers of different sizes **discharged by the printing engines thereinto**, provided **corresponding to each of the printing engines**". It is unclear if the sheets are inserted or discharged. Also, it is unclear how the term "corresponding" relates the chute box arrangement to each of the printing engines.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 and 6, as best understood, are rejected under 35

U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,662,522 (Kokubun et al.).

Regarding claim 1, the embodiment shown in **Figs. 10-13** discloses a paper discharge unit including

a chute box (21) having a plurality of slots (i.e., 1 slot between sides 25 near reference numeral 22, and 1 slot near 32) for inserting papers of different sizes thereinto, provided at different heights in a first surface thereof;

a plurality of guide members (25 and 29), inclined downwardly from the plurality of slots, provided to form a gap (near 28) through which the papers fall toward a second surface (near 24) of the chute box (21) facing the first surface in which the plurality of slots are formed;

wherein the chute box (21) is provided with side walls (26 & 26) for regulating widthwise movement on the guide member of a first paper(34b), having the largest width among the papers (34b and 34a); and each of the guide members (25 and 29) is provided with a guide rib (28 and 31) for regulating widthwise movement of a second paper (34a), which is smaller than the first paper (34b), in cooperation with one of the

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side walls (26), the guide ribs (28) extending from the slot (near 32) to the second surface (near 24) of the chute box (21). In as much as applicant's ribs extend from a slot to a second surface, so do the ribs (28).

Regarding claim 3, Fig. 13 shows that the guide ribs (28) are provided so that upper edges thereof approach the second surface (near 24) of the chute box (21) toward the end of the guide ribs (28) away from the slots.

Regarding claim 6, column 4, lines 54-60 disclose a paper housing portion (discharged paper tray) for stacking and housing the papers, provided below the chute box; and a position controlling member (transportation passage) for causing the papers which fall through the chute box (21) to be stacked in the same direction, provided between the chute box (21) and the paper housing portion.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,661,978 (Brewington) in view of U.S. Patent No. 4,662,522 (Kokubun et al.).

Regarding claim 7, Fig. 4 of the Brewington patent show a printing apparatus including

a plurality of printing engines (including 262, 272, 280) capable of discharging papers of different sizes on which images are printed, the printing engines being housed in the printing apparatus (Fig. 4) in a stacked manner. While the Brewington patent discloses a tray (column 9, lines 54-55) for receiving sheets, the Brewington patent does not specifically disclose that the tray is a chute box, as claimed.

The Kokubun et al. patent discloses that it is well known to provide a chute box (21) on an image forming device (e.g., column 3, line 14), in which the chute box (21) has a plurality of slots (i.e., 1 slot between sides 25 near reference numeral 22, and 1 slot near 32) for inserting papers of different sizes in a first surface thereof;

a plurality of guide members (25 and 29), inclined downwardly from the plurality of slots, provided to form a gap (near 28) through which the papers fall toward a second surface (near 24) of the chute box (21) facing the first surface in which the plurality of slots are formed;

wherein the chute box (21) is provided with side walls (26 & 26) for regulating widthwise movement on the guide member of a first paper (34b), having the largest width among the papers (34b and 34a); and each of the guide members (25 and 29) is provided with a guide rib (28 and 31) for regulating widthwise movement of a second paper (34a), which is smaller than the first paper (34b), in cooperation with one of the side walls (26), the guide ribs (28) extending from the slot (near 32) to the second surface (near 24) of the chute box (21). In as much as applicant's ribs extend from a slot to a second surface, so do the ribs (28). The Kokubun et al. patent explains that

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such a chute box arrangement allows discharged papers to be selected in accordance with the width of the papers to reduce the amount of work required by an operator. See, e.g., column 1, lines 5-10 and lines 35-45. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Brewington apparatus with a chute box that allows discharged papers to be selected in accordance with the width of the papers to reduce the amount of work required by an operator, as taught by Kokubun et al. Providing the imaging device of the Brewington patent with a chute box arrangement according to Kokubun et al. will result in a chute box with a plurality of slots for inserting papers of different sizes discharged by the printing engines thereinto, provided corresponding to each of the printing engines in the first surface thereof. The dictionary defines the term "correspond" as "1. To be in accord; be consistent or compatible..." See Webster's II New Riverside University Dictionary (1984), at page 314. It is the examiner's position that the chute box arrangement will be compatible with each of the printing engines. Thus, all of the limitations of claim 7 are met.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Publication No. 2001-162871 in view of U.S. Patent No. 4,662,522 (Kokubun et al.).

Regarding claim 7, Fig. 13 of Japanese Publication No. 2001-162871 shows a printing apparatus including

a plurality of printing engines (including 115) capable of discharging papers of different sizes on which images are printed, the printing engines being housed in the

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printing apparatus (Fig. 13) in a stacked manner. While Japanese Publication No. 2001-162871 shows a tray (Figs. 12 and 13c) for receiving sheets, Japanese Publication No. 2001-162871 does not specifically disclose that the tray is a chute box, as claimed.

The Kokubun et al. patent discloses that it is well known to provide a chute box (21) on an image forming device (e.g., column 3, line 14), in which the chute box (21) has a plurality of slots (i.e., 1 slot between sides 25 near reference numeral 22, and 1 slot near 32) for inserting papers of different sizes in a first surface thereof;

a plurality of guide members (25 and 29), inclined downwardly from the plurality of slots, provided to form a gap (near 28) through which the papers fall toward a second surface (near 24) of the chute box (21) facing the first surface in which the plurality of slots are formed;

wherein the chute box (21) is provided with side walls (26 & 26) for regulating widthwise movement on the guide member of a first paper (34b), having the largest width among the papers (34b and 34a); and each of the guide members (25 and 29) is provided with a guide rib (28 and 31) for regulating widthwise movement of a second paper (34a), which is smaller than the first paper (34b), in cooperation with one of the side walls (26), the guide ribs (28) extending from the slot (near 32) to the second surface (near 24) of the chute box (21). In as much as applicant's ribs extend from a slot to a second surface, so do the ribs (28). The Kokubun et al. patent explains that such a chute box arrangement allows discharged papers to be selected in accordance



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with the width of the papers to reduce the amount of work required by an operator. See, e.g., column 1, lines 5-10 and lines 35-45. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Japanese Publication No. 2001-162871 with a chute box that allows discharged papers to be selected in accordance with the width of the papers to reduce the amount of work required by an operator, as taught by Kokubun et al. Providing the apparatus of Japanese Publication No. 2001-162871 with a chute box arrangement according to Kokubun et al. will result in a chute box with a plurality of slots for inserting papers of different sizes discharged by the printing engines thereinto, provided corresponding to each of the printing engines in the first surface thereof. The dictionary defines the term "correspond" as "1. To be in accord; be consistent or compatible..." See Webster's II New Riverside University Dictionary (1984), at page 314. It is the examiner's position that the chute box arrangement will be compatible with each of the printing engines.

#### ***Allowable Subject Matter***

5. Claims 2 and 4-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/14/2006

  
GENE R. CRAWFORD  
SUPERVISORY PATENT EXAMINER